

#### ABSTRACT OF THE DISCLOSURE

A method of operating a fuel reformer includes advancing a first air/fuel mixture having a first air-to-fuel ratio into the fuel reformer. The method also includes entrapping soot generated by the fuel reformer in a soot trap. The method  
5 further includes determining if a soot purge of the soot trap is to be performed and generating a purge-soot signal in response thereto. Further, a second air/fuel mixture having a second air-to-fuel ratio is advanced into the fuel reformer in response to generation of the purge-soot signal. The second air-to-fuel ratio is greater than the first air-to-fuel ratio in order to burn soot present in the soot trap. A fuel reformer  
10 system is also disclosed.